



New Mexico Environment Department

Waste Isolation Pilot Plant NMED Activities

Radioactive and Hazardous Materials Committee

Tuesday, June 10, 2014

Overview

- NMED's Role at WIPP
- Overview of Recent Incidents
- NMED's Responses and Activities Related to the Incidents

NMED's Role at WIPP

Six NMED Bureaus

- **Hazardous Waste Bureau (HWB)**
- **DOE Oversight Bureau (DOE/OB)**
- Air Quality Bureau (AQB)
- Ground Water Quality Bureau (GWQB)
- Radiation Control Bureau (RCB)
- Environmental Health Bureau (EHB)
- Note: NMED has also compiled a list of all regulatory agencies and stakeholders.

Hazardous Waste Bureau

- Regulates the hazardous waste component of mixed waste stored and disposed at WIPP
- NMED issued the original hazardous waste permit to WIPP on October 27, 1999
- Renewed permit issued November 30, 2010
- Hazardous waste permits renewed every 10 years
- Next WIPP permit renewal in 2020

DOE Oversight Bureau

- NMED Oversight Bureau conducts oversight and monitoring activities at WIPP.
- Monitoring programs include both joint and independent evaluations of impacts to the environment and public health.
- Environmental sampling and analysis include air particulates, soil and sediment monitoring, vegetation, surface and ground water as well as direct penetrating radiation (gamma) monitoring.

Timeline of Events

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- Feb 5: Underground Fire
- Feb 14: Rad Release Event
- Feb 19: NMED notified of release to atmosphere
- Feb 20: Secretary Flynn held news conference in Carlsbad with Joe Franco (DOE CBFO Manager)
- Feb 27: NMED Issued first Administrative Order (AO)
- Feb 28: NMED collected first ambient air samples
- March 18: First manned entry to underground (UG)
- March 26: NMED requested additional funding for DOE OB sampling and analysis

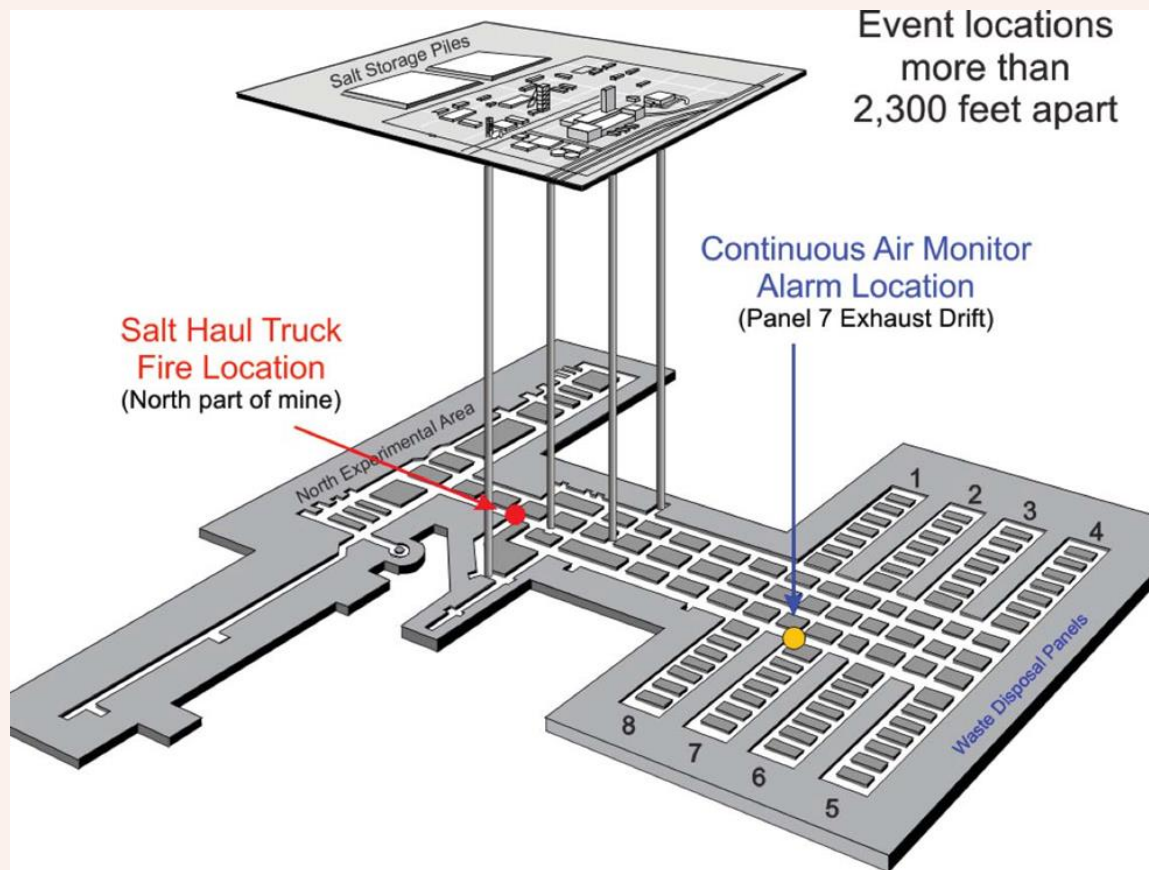
Timeline of Events (continued)

- April 1: LANL began Shipping TRU waste to WCS
- May 1: Suspension of shipments of all LANL transuranic (TRU) waste
- May 5: NMED notified of kitty litter issue
- May 12: Second AO (to WIPP)
- May 19: Third AO (to LANL)
- May 20: Fourth AO (to WIPP)
- May 30: Last UG entry
- June 1: HEPA Filtration System change commenced



March 5th Salt Truck Fire

Smoke coming from salt hoist, burned tire remains on salt truck.



Locations of Fire and Radiologic Release

2,300 feet apart. DOE does not believe the events were related.



Waste Face Prior to Release

Panel 7 Room 7 taken on February 14th before the radiological release event.



After the Radiological Event

Pole with camera is extended over waste and looking down onto waste.

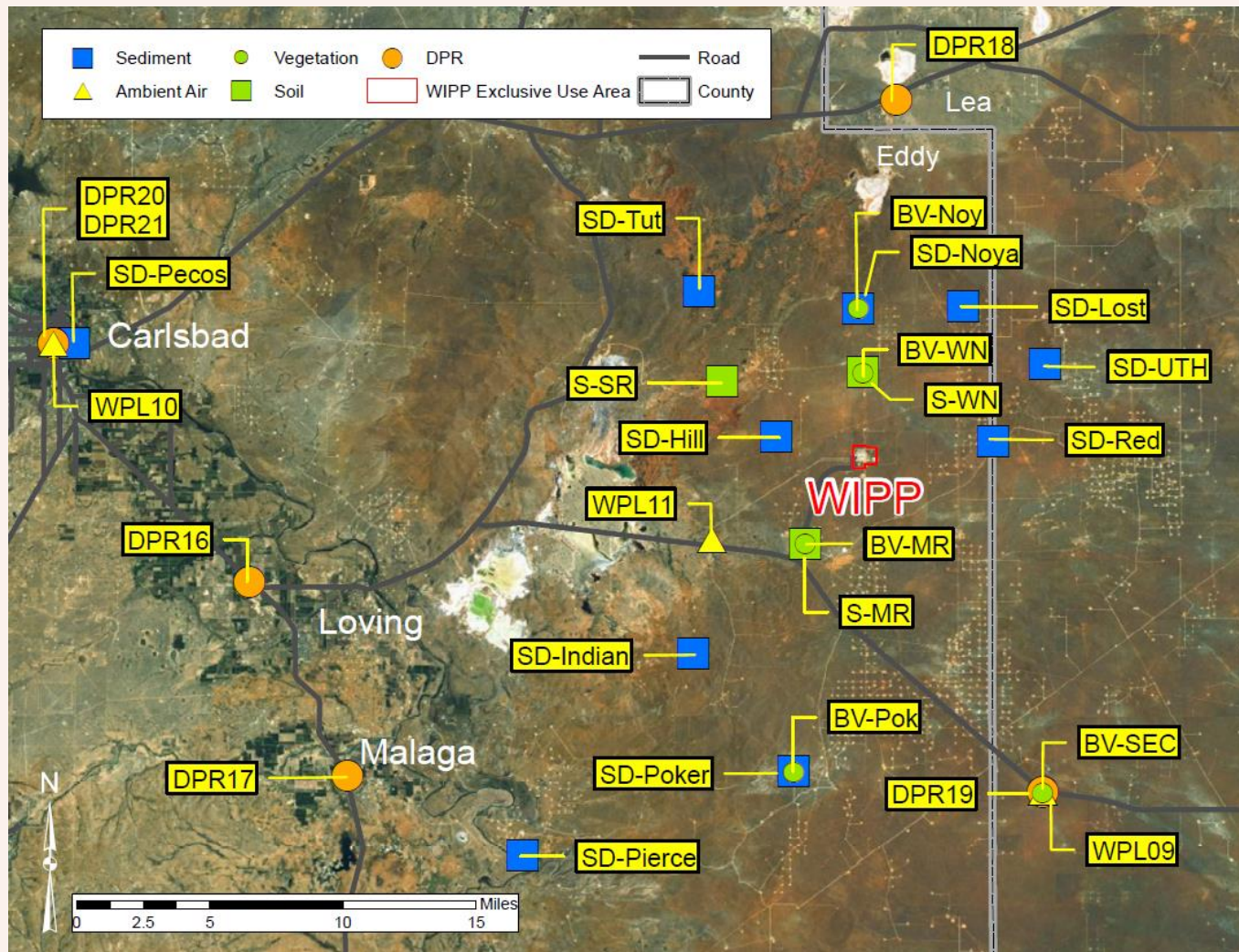


Suspect Drum

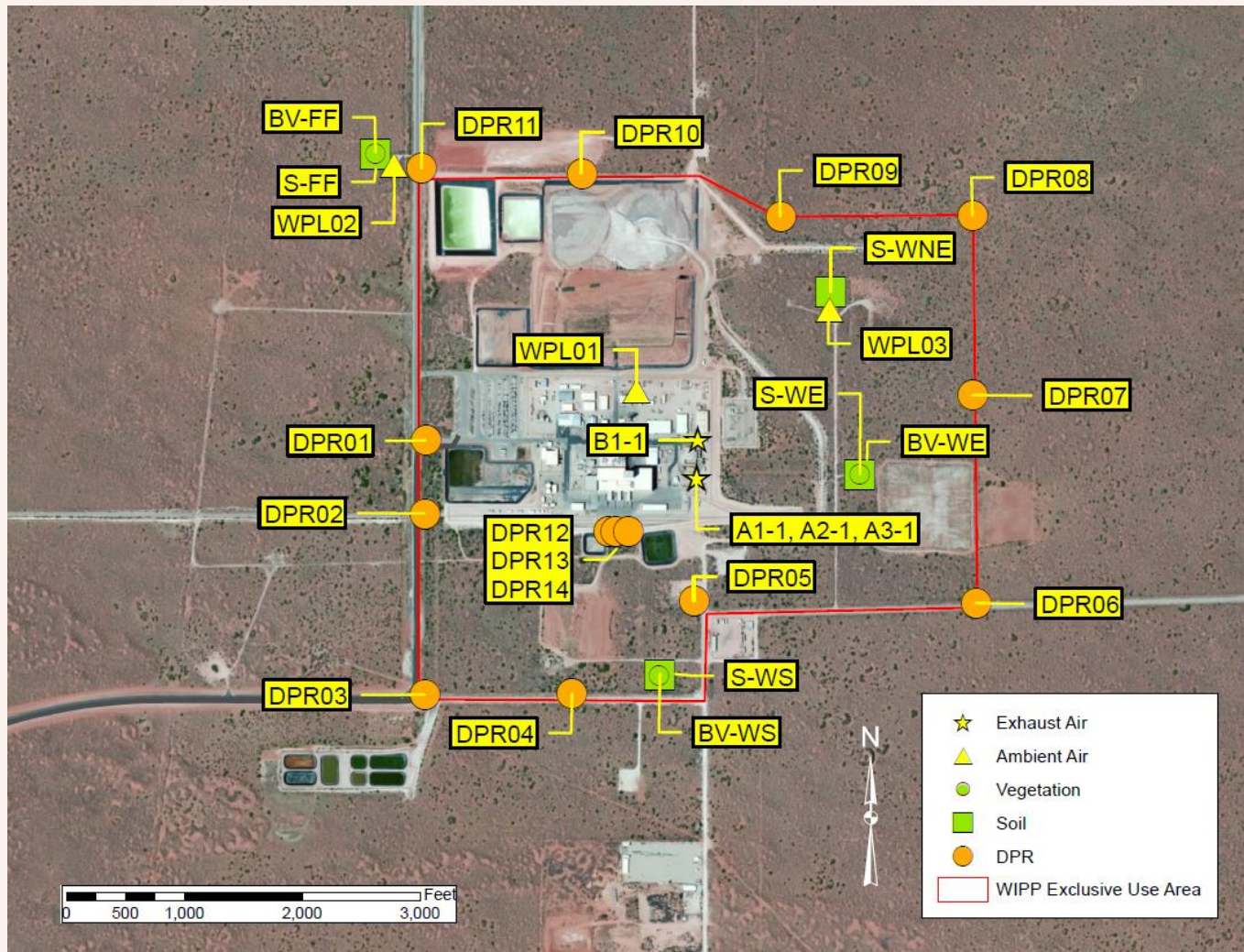
DOE Oversight Bureau Environmental Monitoring at WIPP and Vicinity

- Ambient Air
- Exhaust Air, Stations A and B
- General Environmental
 - Soil (plume area only)
 - Sediment
 - Surface water
 - Vegetation
- Penetrating radiation (gamma)

NMED Sampling Locations for Radiological Release Response



NMED Sampling Locations for Radiological Release Response (around facility)



Exhaust Air, Stations A & B

- A total of 78 filter samples (individual and composite) were submitted for isotopic analyses.
- January and February, Station A, Station B, and Quality Control (QC) samples are at the analytical laboratory, expect data June 25, followed by data reduction and review
- March, Station B, and QC samples are at the analytical laboratory, also expect data June 25, followed by data reduction and review

Ambient Air Monitoring

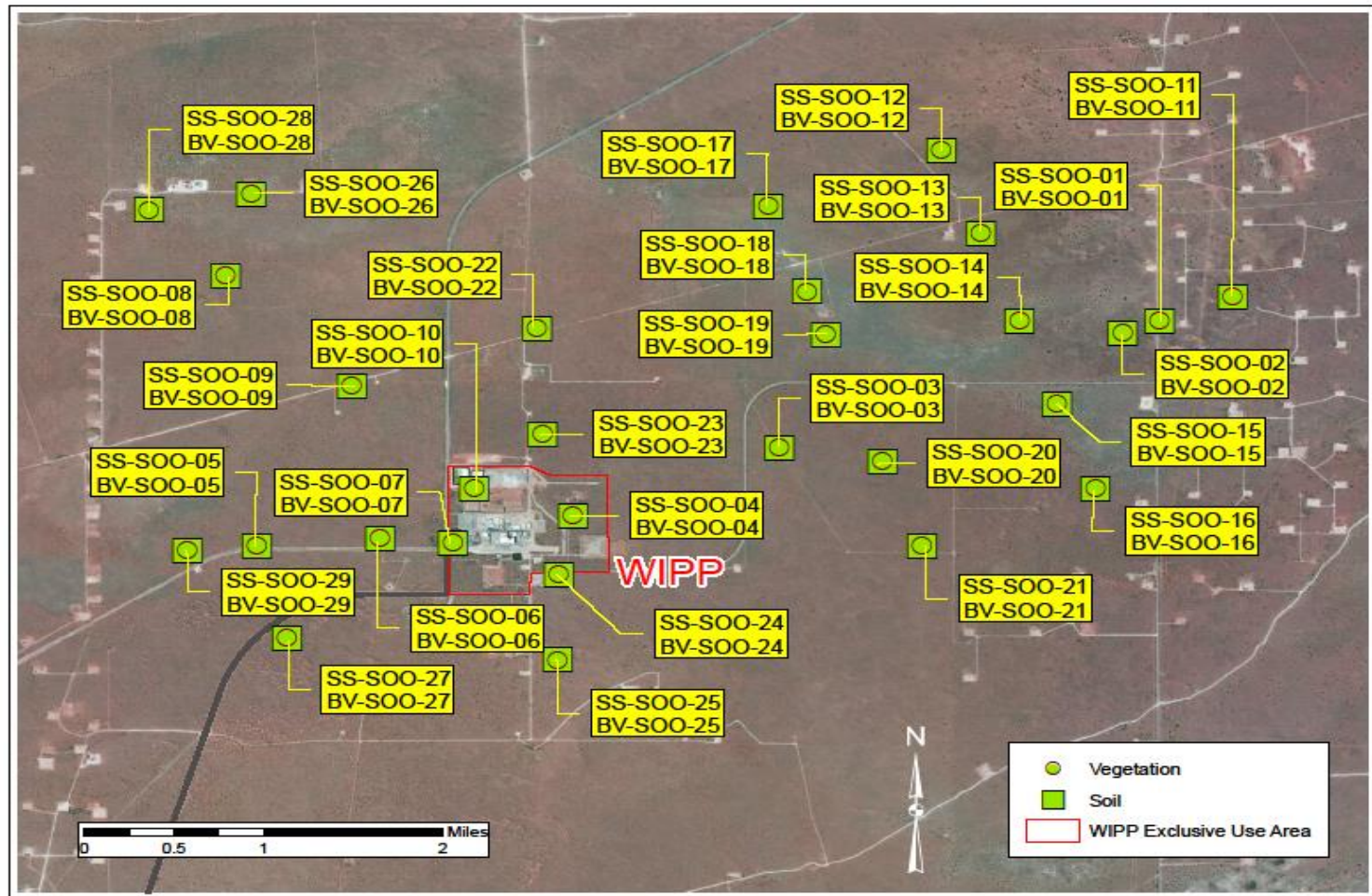
- A total of 32 air samples were submitted for isotopic analyses.
- For the periods February 21 to 28 and February 28 to March 11, the draft air monitoring reports are under review
- March 11 to 25, and the month of April, results are in from the laboratory. Data reduction and review
- For the month of May, samples are at the analytical laboratory, expect data before June 30.



Solar Powered Ambient Air Monitor

A unique capability of the New Mexico Environment Department to protect public health.

DOE OB Soil and Vegetation Sampling in Plume Area



General Environmental Monitoring at WIPP and Vicinity

Sample Type	Number of Samples	Status
Sediment	6 +1	Undergoing data reduction and review
Surface Water	3 +1	Undergoing data reduction and review
Soil	18	Undergoing data reduction and review
Vegetation	18	Undergoing data reduction and review

DOE OB Funding

- Secretary Flynn requested and received an additional \$275,928 from the Department of Energy for the current fiscal year to pay the additional costs of laboratory analyses for this release response.
- The grant continuation funding request for next fiscal year (July 1) also includes supplemental funding in the amount of \$220,694 for sampling and analysis costs related to this release recovery.

What Will the Data Tell Us?

- Collaborating with CEMRC, DOE, and EPA on environmental monitoring
- Extent of contamination in the environment
- Impact of the event on the environment
- Potential impact on human health
- Provide correct information to policy makers

Four Administrative Orders

NMED Responsive Actions

Administrative Orders

- NMED has issued four Administrative Orders since the February 5th event.
- Provide immediate direction to address impending non-compliance of the permit.
- Can be found at:
<http://www.nmenv.state.nm.us/NMED/Issues/WIPP2014Docs.html>

NMED Administrative Orders

- First: February 27, 2014 (WIPP)
 - Extended storage time limits in the WHB
 - Weekly reports
- Second: May 12, 2014 (WIPP)
 - Underground Derived Waste Storage Plan (Contingency Plan)
 - Trichloroethylene (TCE) added to the Target Analyte List for VOCs.
 - Clarification to First Order

NMED Administrative Orders

- Third: May 19, 2014 (LANL)
 - Develop a LANL Nitrate-Bearing Waste Container Isolation Plan.
 - Required to stay in daily contact with NMED
 - An initial plan was received by NMED on May 21, 2014. NMED reviewed the Plan, found it to be deficient in several areas, and submitted comments back to LANL.
 - NMED approved the Plan on May 23 contingent upon implementation of the submitted comments.
 - Revised Plan was received May 29
 - Still Under Review

NMED Administrative Orders

- Fourth: May 20, 2014 (WIPP)
 - Develop a WIPP Nitrate-Bearing Waste Container Isolation Plan
 - Develop a Panel Closure Plan
 - Submitted plan to NMED on May 30th
 - Still Under Review

Activities

- Creation of Fire and Rad Release Webpage:
<http://www.nmenv.state.nm.us/NMED/Issues/WIPP2014.html>
- Withdrawal of draft Class 3 permit modification on March 21, 2014
- Review of Reports submitted in response to Administrative Orders
- Rapid and comprehensive responses to media inquiries
- Diligently collecting and preparing IPRA responses.

Other Activities

- Request documentation of activities at WIPP and LANL
- Daily phone briefings and bi-weekly in-person meetings with WIPP and LANL
- Attended EPA Panel Closure Rule Making Public Meeting in Albuquerque, January 2014
- Continuation of regular work – audits, permit modification requests, etc.

Conclusions

- The New Mexico Environment Department will continue to aggressively regulate and monitor WIPP, to ensure it is in compliance with the Hazardous Waste Facility Permit and all applicable hazardous waste regulations to protect human health and the environment.

For more information...

- NMED Rad Release Event Page
 - <http://www.nmenv.state.nm.us/NMED/Issues/WIPP2014.html>
- NMED WIPP Permit Information Page
 - <http://www.nmenv.state.nm.us/wipp/>
- DOE OB Page
 - http://www.nmenv.state.nm.us/DOE_Oversight/

Questions?

Communication within our agency,
with Permittees and with stakeholders is key!

Please call or email:

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